



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
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BOSTON, MASSACHUSETTS 02114-2023

November 12, 2002

Lonnie Monaco (monacolj@efane.navfac.navy.mil)
Engineering Field Activity Northeast, Naval Facilities Engineering Command
Code 1821/LM
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

**Re: Draft 2001 Annual and Monitoring Event 20 Reports for Site 9, Naval Air Station
Brunswick, Maine**


Dear Mr. Monaco:

Thank you for the opportunity to review the above reports which were submitted by EA Engineering, Science and Technology on behalf of the Navy on 23 August and 5 November 2002 respectively.

In general the EPA concurs with the draft reports summaries, conclusions and findings; our specific comments and/or any issues are attached. The EPA strongly supports the optimization of the Long Term Monitoring Program (LTMP) at site 9. We look forward to upcoming discussions on this topic as generally discussed at the 22 October 2002 technical meeting and following that, submission of a formal draft revision 2 to the LTMP by the Navy.

For any questions, please contact me at 617.918.1344 or barry.michael@epa.gov.

Sincerely,


Michael S. Barry
Remedial Project Manager
Federal Facilities Superfund Section

Attachment 1: Specific Comments to 2001 Draft Annual Report
Attachment 2: Specific Comments to Monitoring Event 20 (April 2002)
Enclosure: Total VOC Chart (hard copy only)

cc. Ed Benedikt/Brunswick Conservation Commission (rbenedik@ghi.net)
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Attachment 1
US EPA New England Comments to Draft 2001 Annual Monitoring Report,
Site 9, Naval Air Station Brunswick, Maine

Comment codes: NR No specific response required, comment for record or observation
 ED Editorial comment
 RR Response requested
 MTG Recommend comment be discussed at meeting prior to formal response

Summary and Conclusions, Section 3.1

1. (NR) Section 3.1.2, Page 3-3, bullet 1. We concur that it's likely that the primary source of the 1,2-Dichloroethylene (and subsequent vinyl chloride) is upgradient, in the area of the NEX. We speculate that "source area" rather than a source in the traditional sense exists(ed) due to the apparent relative low level of VOCs. We speculate the cause of the "source area" may have been occasional, undocumented, historical small volume dumping.
2. (NR) Section 3.1.2, Page 3-3, bullet 2. Regarding the source of VOCs in MW-227 we concur that it is likely a non-significant source from historical operations along the flight line to the west. In EPA's experience it's very common for flight lines to contain several small VOCs sources from episodic releases associated with maintenance activities dating from before hanger floor drains were connected to the sewer, or before waste VOCs were captured in systems for recycling, reuse or disposal elsewhere. Due to the historical nature and small size of these releases (relative to a fire training area or a drum burial pit) a discrete source for many of these type of sites is not discernable at the present time.
3. (NR) Section 3.1.3, Page 3-4. Noted and concur with explanation regarding low level 1,2-DCE detected in surface water at SW-010.

Recommendations, Section 3.2, Page 3.5

4. (NR) Concur with recommendation bullets 1-3 without comment.
5. (RR/MTG) Bullet 4 regarding SVOCs. Concur with eliminating SVOCs from MW-69, 70 and 79 except for once every five years and upon concurrence of the project team. Despite the long history of non-detections of SVOCs, a sample is required for the five review to assess remedy protectiveness regarding the waste that remains in place in the ash landfill. EPA envisions that this change would be implemented by the Navy submitting a LTMP revision to section 1.4.5 and table 3.1 of the Final LTMP (August 1999). (LTMP draft revision 1 was submitted in July 2001, but has never been finalized.)
6. (NR/MTG) Bullet 5 regarding LTMP optimization; EPA looks forward to participating this effort. In our view, many of the wells are no longer producing useful information, especially given their semi-annual sampling periodicity and overall low concentrations detected. On the other hand, the network is apparently only "hitting" the plume at one well, MW-69, and new, better placed well would aid in monitoring plume trends. Another approach to LTMP optimization would be to deploy vapor diffuser samplers in the retention ponds to identify plume discharge zones, then monitor with a few water diffuser samplers in lieu of more/some of the monitoring wells. This would have the benefit of directly monitoring the affected ecological receptor but would require a large number of vapor samplers to locate the water sampler locations. The EPA lab could be scheduled per availability to analyze the vapor samplers to reduce implementation costs to the

Navy. This is not a formal proposal at this time, but is a possible approach for project team discussion regarding LTMP optimization.

Attachment 2
US EPA New England Comments to
Draft Monitoring Event 20 Report (April 2002), Site 9
Naval Air Station Brunswick, Maine

Comment codes: NR No specific response required, comment for record or observation
 ED Editorial comment
 RR Response requested
 MTG Recommend comment be discussed at meeting prior to formal response

1. (NR) Section 2.2.2.1, Page 8, Paragraphs 1&@. Concur, please see comment ## below.
2. (NR) Section 2.2.2.1, Page 8, Paragraph 3. Same as comment #1 to 2001 Annual Report regarding the source of the 1,2-DCE.
3. (NR) Section 2.2.2.1, Page 8, Paragraph 4. If the VOC concentration spikes noted are "smoothed out" on a graph of total VOCs added for all wells, the below overall trend is discernable to EPA. A graph of the below is attached to hard copies of this letter; note that to be consistent, only low flow results have been graphed
 - a. 1995-1999: level to gentle rise with increasing rise in 1998-1999.
 - b. 1999-2000: steep rise
 - c. 2000-2001: leveling off
 - d. 2001-to date: gentle decrease (note that 4/02 event results have been included)

The VOC concentration "spikes" could be caused by many factors including actions at the NEX as noted. It's interesting to note that if either the two annual events are averaged or if either semi annual event were eliminated the same overall trend would be indicated to EPA.

4. (NR/MTG) Section 2.2.2.1, Page 8, Paragraph 5. Concur that the data indicates that MW-69 appears to be the well within the network that solidly "hits" the plume, such as it is at site 9. It's unclear to EPA if the other wells are detecting much lower VOC concentrations because the plume core isn't there or if the wells are not optimally placed vertically or horizontally. Further optimization of the LTM network may answer this question more definitively. EPA looks forward to discussions about new wells/decommissioning wells which are planned for the coming months.
5. (NR) Section 2.2.2.1, Page 8, Paragraph 6 regarding diffusion samplers, same as comment 8.b.
6. (ED/RR) Section 2.2.2.1, Page 9, MW-69 bullet. There appears to be a calculation error in Table A-1 which indicates a false rise in total VOCs by counting cis-1,2-DCE twice; as cis-1,2-DCE and within total 1,2-DCE. The trend graphs indicate this as well by showing both vinyl chloride and total 1,2-DCE (the vast majority of which is cis) decreasing, but total VOC's rising.
7. (NR) Section 2.2.2.1, Page 9, MW-227 Bullet. Results noted, same comment regarding the

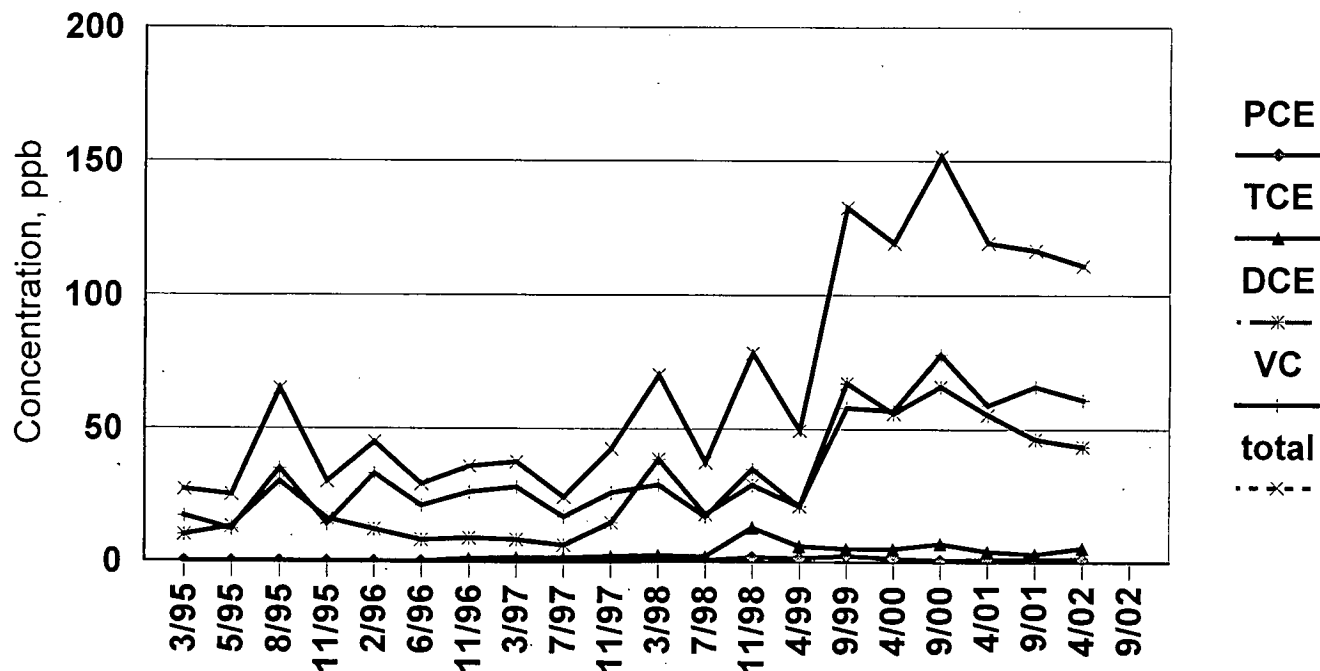
source of the VOCs in MW-227 as in comment #2 to the 2001 Draft Annual Report.

8. Section 3, Page 12, Recommendations

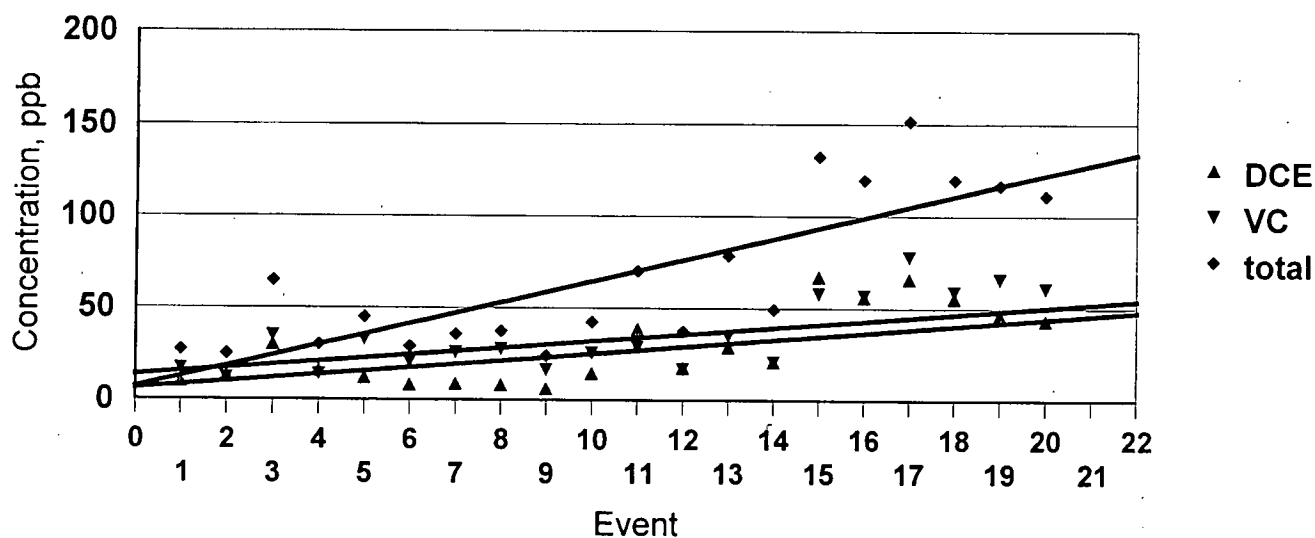
- a. (RR/MTG) Bullet 1. Concur with continuing LTM and assessing natural attenuation. Per EPA's understanding, the most recent final LTMP is the original one, dated August 1999. A draft revision 1 dated July 2001 was submitted and commented to by EPA and MEDEP but never finalized. There were some issues with wording in the LTMP, but it seems that at the time the parties concurred on sampling points, analyses, etc. EPA has no overriding preference in either finalizing revision 1 or waiting until the LTMP is optimized and reviewing a draft revision 2 to the LTMP. What is the Navy's intention? Please see comment 6 to the draft 2001 annual report regarding LTMP optimization in general.
- b. (NR/MTG) Bullet 2. Concur. EPA looks forward to reviewing a formal proposal to shift to diffusion samplers; we highly recommend this be discussed at a technical meeting prior to the Navy submitting a draft proposal so as to ensure all requirements are met yet minimize administrative burden and comments/response required.
- c. (NR) Bullets 3 and 4. Concur without comment.

date	3/95	5/95	8/95	11/95	2/96	6/96	11/96	3/97	7/97	11/97	3/98	7/98	11/98	4/99	9/99	4/00	9/00	4/01	9/01	4/02	9/02
event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PCE	0	0	0	0	0	0	0	0	0	0	0.4	0.6	1.7	1.4	2.3	1.4	0.7	0.9	1.3	1.1	
TCE	0	0	0	0	0	0	1	1.4	1.4	2	2.3	2	12.9	6	5	5	7	4	3	5.4	
DCE	10.0	13.0	30.0	16.0	12.0	8.0	8.8	8.1	6.1	14.5	38.6	17.8	28.9	21.0	67.2	56.0	66.0	55.5	46.3	43.5	
VC	17.0	12.0	35.0	14.0	33.0	21.0	26.0	28.0	16.7	25.9	28.9	17.0	35.0	21.0	58.0	57.0	78.0	59	66	61	
total	27.0	25.0	65.0	30.0	45.0	29.0	35.8	37.5	24.2	42.4	70.2	37.4	78.5	49.4	132.5	119.4	151.7	119.4	116.6	111.0	

Sum of VOCs in Site 9 Wells



Sum of VOCs in Site 9 Wells - Trend Line



R-square = 0.658 # pts = 20
 $y = 6.81 + 5.77x$